SEQUENCE LISTING

<110> Clark, Geoff

Ellis, Chad

Vos, Michelle

<120> Rig: Novel Ras-Related Gene

<130> NIH-05080

<160> 15

<170> PatentIn version 3.0

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<213> Homo sapiens

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gaggacacct accggcaggt gatcagctgc gacaagagcg tgtgcacgct gcagatcaca 180

gacaccaccg gcagccacca gttcccggcc atgcagcgcc tgtccatctc caagggccac 240

gccttcatcc tggtgttctc cgtcaccagc aagcagtcgc tggaggagct ggggcccatc 300

tacaagctca tcgtgcagat caagggcagc gtggaggaca tccccgtgat gctcgtgggc 360

aacaagtgcg atgagacgca gcgggaggtg gacacgcgcg aggcgcaggc ggtggcccaa 420

gagtggaagt gcgctttcat ggagacctcg gccaagatga actacaacgt caaggagctc 480

ttccaggagc tgctgacgct ggagacgcgc cggaacatga gcctcaacat cgacggcaag 540

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<210> 5

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<213> Homo sapiens

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1 5 10 15

Gly Val Gly Lys Ser Ser Leu Val Leu Arg Phe Val Lys Gly Thr Phe
20 25 30

Arg Asp Thr Tyr Ile Pro Thr Ile Glu Asp Thr Tyr Arg Gln Val Ile
35 40 45

Ser Cys Asp Lys Ser Val Cys Thr Leu Gln Ile Thr Asp Thr Thr Gly
50 55 60

Ser His Gln Phe Pro Ala Met Gln Arg Leu Ser Ile Ser Lys Gly His
65 70 75 80

Ala Phe Ile Leu Val Phe Ser Val Thr Ser Lys Gln Ser Leu Glu Glu
85 90 95

Leu Gly Pro Ile Tyr Lys Leu Ile Val Gln Ile Lys Gly Ser Val Glu
100 105 110

Asp Ile Pro Val Met Leu Val Gly Asn Lys Cys Asp Glu Thr Gln Arg
115 120 125

Glu Val Asp Thr Arg Glu Ala Gln Ala Val Ala Gln Glu Trp Lys Cys
130 135 140

Ala Phe Met Glu Thr Ser Ala Lys Met Asn Tyr Asn Val Lys Glu Leu
145 150 155 160

Phe Gln Glu Leu Leu Thr Leu Glu Thr Arg Arg Asn Met Ser Leu Asn
165 170 175

Ile Asp Gly Lys Arg Ser Gly Lys Gln Lys Arg Thr Asp Arg Val Lys
180 185 190

Gly Lys Cys Thr Leu Met
195

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Val Lys Gly Lys
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<210> 9

<211> 229

<212> PRT

<213> Homo sapiens

<400> 9

Met Gly Asn Ala Ser Phe Gly Ser Lys Glu Gln Lys Leu Leu Lys Arg
1 5 10 15

Leu Arg Leu Leu Pro Ala Leu Leu Ile Leu Arg Ala Phe Lys Pro His
20 25 30

Arg Lys Ile Arg Asp Tyr Arg Val Val Val Val Gly Thr Ala Gly Val
35 40 45

Gly Lys Ser Thr Leu Leu His Lys Trp Ala Ser Gly Asn Phe Arg His
50 55 60

Glu Tyr Leu Pro Thr Ile Glu Asn Thr Tyr Cys Gln Leu Leu Gly Cys
65 70 75 80

Ser His Gly Val Leu Ser Leu His Ile Thr Asp Ser Lys Ser Gly Asp
85 90 95

Gly Asn Arg Ala Leu Gln Arg His Val Ile Ala Arg Gly His Ala Phe
100 105 110

Val Leu Val Tyr Ser Val Thr Lys Lys Glu Thr Leu Glu Glu Leu Lys
115 120 125

Ala Phe Tyr Glu Leu Ile Cys Lys Ile Lys Gly Asn Asn Leu His Lys
130 135 140

Phe Pro Ile Val Leu Val Gly Asn Lys Ser Asp Asp Thr His Arg Glu
145 150 155 160

Val Ala Leu Asn Asp Gly Ala Thr Cys Ala Met Glu Trp Asn Cys Ala
165 170 175

Phe Met Glu Ile Ser Ala Lys Thr Asp Val Asn Val Gln Glu Leu Phe
180 185 190

His Met Leu Leu Asn Tyr Lys Lys Lys Pro Thr Thr Gly Leu Gln Glu
195 200 205

Pro Glu Lys Lys Ser Gln Met Pro Asn Thr Thr Glu Lys Leu Leu Asp
210 215 220

Lys Cys Ile Ile Met
225

<210> 10

<211> 206

<212> PRT

<213> Homo sapiens

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Met Ala Ala Asn Lys Pro Lys Gly Gln Asn Ser Leu Ala Leu His Lys
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Val Ile Met Val Gly Ser Gly Gly Val Gly Lys Ser Ala Leu Thr Leu
20 25 30

Gln Phe Met Tyr Asp Glu Phe Val Glu Asp Tyr Glu Pro Thr Lys Ala
35 40 45

Asp Ser Tyr Arg Lys Lys Val Val Leu Asp Gly Glu Glu Val Gln Ile
50 55 60

Asp Ile Leu Asp Thr Ala Gly Gln Glu Asp Tyr Ala Ala Ile Arg Asp
65 70 75 80

Asn Tyr Phe Arg Ser Gly Glu Gly Phe Leu Cys Val Phe Ser Ile Thr
85 90 95

Glu Met Glu Ser Phe Ala Ala Thr Ala Asp Phe Arg Glu Gln Ile Leu
100 105 110

Arg Val Lys Glu Asp Glu Asn Val Pro Phe Leu Leu Val Gly Asn Lys
115 120 125

Ser Asp Leu Glu Asp Lys Arg Gln Val Ser Val Glu Glu Ala Lys Asn
130 135 140

Arg Ala Glu Gln Trp Asn Val Asn Tyr Val Glu Thr Ser Ala Lys Thr
145 150 155 160

Arg Ala Asn Val Asp Lys Val Phe Phe Asp Leu Met Arg Glu Ile Arg
165 170 175

Ala Arg Lys Met Glu Asp Ser Lys Glu Lys Asn Gly Lys Lys Lys Arg
180 185 190

Lys Ser Leu Ala Lys Arg Ile Arg Glu Arg Cys Cys Ile Leu
195 200 205

<210> 11

<211> 184

<212> PRT

<213> Homo sapiens

<400> 11

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Ser Ala Leu Thr Val Gln Phe Val Gln Gly Ile Phe Val Glu Lys Tyr
            20                  25                  30

Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Glu Val Asp Cys
        35                  40                  45

Gln Gln Cys Met Leu Glu Ile Leu Asp Thr Ala Gly Thr Glu Gln Phe
    50                  55                  60

Thr Ala Met Arg Asp Leu Tyr Met Lys Asn Gly Gln Gly Phe Ala Leu
65                  70                  75                  80

Val Tyr Ser Ile Thr Ala Gln Ser Thr Phe Asn Asp Leu Gln Asp Leu
                85                  90                  95

Arg Glu Gln Ile Leu Arg Val Lys Asp Thr Glu Asp Val Pro Met Ile
            100                 105                 110

Leu Val Gly Asn Lys Cys Asp Leu Glu Asp Glu Arg Val Val Gly Lys
        115                 120                 125

Glu Gln Gly Gln Asn Leu Ala Arg Gln Trp Cys Asn Cys Ala Phe Leu
    130                 135                 140

Glu Ser Ser Ala Lys Ser Lys Ile Asn Val Asn Glu Ile Phe Tyr Asp
145                 150                 155                 160

Leu Val Arg Gln Ile Asn Arg Lys Thr Pro Val Glu Lys Lys Lys Pro
                165                 170                 175

Lys Lys Lys Ser Cys Leu Leu Leu
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<210> 12

<211> 183

<212> PRT

<213> Homo sapiens

<400> 12

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Met Arg Glu Tyr Lys Val Val Val Leu Gly Ser Gly Gly Val Gly Lys
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Ser Ala Leu Thr Val Gln Phe Val Thr Gly Thr Phe Ile Glu Lys Tyr
            20                  25                  30
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Asp Pro Thr Ile Glu Asp Phe Tyr Arg Lys Glu Ile Glu Val Asp Ser
35 40 45

Ser Pro Ser Val Leu Glu Ile Leu Asp Thr Ala Gly Thr Glu Gln Phe
50 55 60

Ala Ser Met Arg Asp Leu Tyr Ile Lys Asn Gly Gln Gly Phe Ile Leu
65 70 75 80

Val Tyr Ser Leu Val Asn Gln Gln Ser Phe Gln Asp Ile Lys Pro Met
85 90 95

Arg Asp Gln Ile Ile Arg Val Lys Arg Tyr Glu Lys Val Pro Val Ile
100 105 110

Leu Val Gly Asn Lys Val Asp Leu Glu Ser Glu Arg Glu Val Ser Ser
115 120 125

Ser Glu Gly Arg Ala Leu Ala Glu Glu Trp Gly Cys Pro Phe Met Glu
130 135 140

Thr Ser Ala Lys Ser Lys Thr Met Val Asp Glu Leu Phe Ala Glu Ile
145 150 155 160

Val Arg Gln Met Asn Tyr Ala Ala Gln Pro Asp Lys Asp Asp Pro Cys
165 170 175

Cys Ser Ala Cys Asn Ile Gln
180

<210> 13

<211> 189

<212> PRT

<213> Homo sapiens

<400> 13

Met Thr Glu Tyr Lys Leu Val Val Val Gly Ala Gly Gly Val Gly Lys
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Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr
20 25 30

Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly
35 40 45

Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr
50 55 60

Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys
65 70 75 80

Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr
85 90 95

Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Asp Val Pro Met Val
100 105 110

Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg
115 120 125

Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr
130 135 140

Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val
145 150 155 160

Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu
165 170 175

Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser
180 185

<210> 14

<211> 218

<212> PRT

<213> Homo sapiens

<400> 14

Met Ser Ser Gly Ala Ala Ser Gly Thr Gly Arg Gly Arg Pro Arg Gly
1 5 10 15

Gly Gly Pro Gly Pro Gly Asp Pro Pro Pro Ser Glu Thr His Lys Leu
20 25 30

Val Val Val Gly Gly Gly Gly Val Gly Lys Ser Ala Leu Thr Ile Gln
35 40 45

Phe Ile Gln Ser Tyr Phe Val Ser Asp Tyr Asp Pro Thr Ile Glu Asp
50 55 60

Ser Tyr Thr Lys Ile Cys Ser Val Asp Gly Ile Pro Ala Arg Leu Asp
65 70 75 80

Ile Leu Asp Thr Ala Gly Gln Glu Glu Phe Gly Ala Met Arg Glu Gln
85 90 95

Tyr Met Arg Ala Gly His Gly Phe Leu Leu Val Phe Ala Ile Asn Asp
100 105 110

Arg Gln Ser Phe Asn Glu Val Gly Lys Leu Phe Thr Gln Ile Leu Arg
115 120 125

Val Lys Asp Arg Asp Asp Phe Pro Val Val Leu Val Gly Asn Lys Ala
130 135 140

Asp Leu Glu Ser Gln Arg Gln Val Pro Arg Ser Glu Ala Ser Ala Phe
145 150 155 160

Gly Ala Ser His His Val Ala Tyr Phe Glu Ala Ser Ala Lys Leu Arg
165 170 175

Leu Asn Val Asp Glu Ala Phe Glu Gln Leu Val Arg Ala Val Arg Lys
180 185 190

Tyr Gln Glu Gln Glu Leu Pro Pro Ser Pro Pro Ser Ala Pro Arg Lys
195 200 205

Lys Gly Gly Gly Cys Pro Cys Val Leu Leu
210 215

<210> 15

<211> 184

<212> PRT

<213> Homo sapiens

<400> 15

Met Pro Gln Ser Lys Ser Arg Lys Ile Ala Ile Leu Gly Tyr Arg Ser
1 5 10 15

Val Gly Lys Ser Ser Leu Thr Ile Gln Phe Val Glu Gly Gln Phe Val
20 25 30

Asp Ser Tyr Asp Pro Thr Ile Glu Asn Thr Phe Thr Lys Leu Ile Thr
35 40 45

Val Asn Gly Gln Glu Tyr His Leu Gln Leu Val Asp Thr Ala Gly Gln
50 55 60

Asp Glu Tyr Ser Ile Phe Pro Gln Thr Tyr Ser Ile Asp Ile Asn Gly
65 70 75 80

Tyr Ile Leu Val Tyr Ser Val Thr Ser Ile Lys Ser Phe Glu Val Ile
85 90 95

Lys Val Ile His Gly Lys Leu Leu Asp Met Val Gly Lys Val Gln Ile
100 105 110

Pro Ile Met Leu Val Gly Asn Lys Lys Asp Leu His Met Glu Arg Val
115 120 125

Ile Ser Tyr Glu Glu Gly Lys Ala Leu Ala Glu Ser Trp Asn Ala Ala
130 135 140

Phe Leu Glu Ser Ser Ala Lys Glu Asn Gln Thr Ala Val Asp Val Phe
145 150 155 160

Arg Arg Ile Ile Leu Glu Ala Glu Lys Met Asp Gly Ala Ala Ser Gln
165 170 175

Gly Lys Ser Ser Cys Ser Val Met
180